

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

4

Complete If Known

Application Number

10/046,380

Filing Date

01/16/2002

First Named Inventor

Cavanaugh, Philip G.

Group Art Unit

1617

Examiner Name

Shengjun Wang

Attorney Docket Number

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

S. W. J.

Date Considered

8/19/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw lines through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**



Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (10-85)
Approved for use through 10/31/89. OMB 0851-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1985, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/046,380
		Filing Date	01/16/2002
		First Named Inventor	Cavanaugh, Philip G.
		Group Art Unit	1617
		Examiner Name	Shengjun Wang
Attorney Docket Number			
Sheet	2	of	4

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	12
SW	1	Conrad, M.E., and Umbreit, J.N. Iron absorption and transport-an update. Am J Hematol 64:287-298, 2000.	
	2	Ponka, P., Beaumont, C., and Richardson, D.R. Function and regulation of transferrin and ferritin. Seminars in Hematology 35: 35-54, 1998.	
	3	Testa, U., Pelosi, E., and Peschle, C. The transferrin receptor. Crit. Rev. Oncog., 4:241-276, 1993.	
	4	Ponka, P., and Lok, C.N. The transferrin receptor: role in health and disease. Int J Biochem Cell Biol 31: 1111-1137, 1999.	
	5	Gatter, K.C., Brown, G., Trowbridge, I.S., Woolston, R.E., Mason, D.Y. Transferrin receptors in human tissues: their distribution and possible clinical relevance. J Clin Pathol 36: 539-545. 1983.	
	6	Niitsu, Y., Kohgo, Y., Nishisato, T., Kondo, H., Kato, J., Urushizaki, Y., and Urushizaki, I. Transferrin receptors in human cancerous tissues. Tohoku J Exp Med 153:239-243, 1987.	
	7	Tani, H., Morris, R.J., Kaur, P. Enrichment for murine keratinocyte stem cells based on cell surface phenotype. Proc Natl Acad Sci U S A. 97:10960-10965, 2000.	
	8	Juhlin L. Detection of transferrin and C3d receptors in the skin of patients with various dermatoses. Acta Derm Venereol. 69:492-496, 1989.	
	9	Wrba, F., Ritzinger, E., Reiner, A., and Holzner, J. H. Transferrin receptor (TrfR) expression in breast carcinoma and its possible relationship to prognosis. An immunohistochemical study. Virchows Arch. 41: 69-73, 1986.	
	10	Seymour, G. J., Walsh, M. D., Lavin, M. F., Strutton, G., and Gardiner, R. A. Transferrin receptor expression by human bladder transitional cell carcinomas. Urol. Res. 15: 341-344, 1987.	
SW	11	Van Muijen, G. N., Ruiter, D. J., Hoefakker, S. and Johnson J. P. Monoclonal antibody PAL-M1 recognizes the transferrin receptor and is a progression marker for metastasis. J. Invest. Dermatol. 95: 65-69, 1990.	

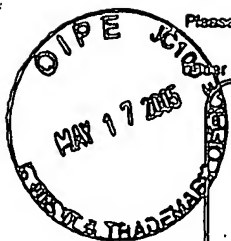
Examiner Signature		Date Considered	8/19/05
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

BEST AVAILABLE COPY



Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (10-88)
Approved for use through 10/31/89. OMB 0551-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/046,380
		Filing Date	01/16/2002
		First Named Inventor	Cavanaugh, Philip G.
		Group Art Unit	1617
		Examiner Name	Shengjun Wang
Sheet 3	of 4	Attorney Docket Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
SW	12	Yoda, J., Yamanaka, N., Saito, T., Samukawa, T., Tamura, S., and Kawaguchi, T. Characterization of cell lines from metastatic maxillary cancer. Journal of the Oto-Rhino-Laryngological Society of Japan 97: 419-429, 1994.	
	13	Van Muijen, G. N. P., Jansen, K. F. J., Cornelissen, I. M. H. A., Smeets, D. F. C. M., Beck, J. L. M., and Ruiter, D. J. Establishment and characterization of a human melanoma cell line (MV3) which is highly metastatic in nude mice. Int. J. Cancer 48: 85-91, 1991.	
	14	Stackpole CW, Kalbag SS, Groszek L. Acquisition of in vitro growth autonomy during B16 melanoma malignant progression is associated with autocrine stimulation by transferrin and fibronectin. In Vitro Cell Dev Biol 31: 244-251, 1995	
	15	Rossi, M. C. and Zetter, B. R. Selective stimulation of prostatic carcinoma cell proliferation by transferrin. Proc. Natl. Acad. Sci. USA, 89: 6197-6201, 1992.	
	16	Cavanaugh, P.G. and Nicolson, G. L. Lung derived growth factor that stimulates the growth of lung-metastasizing tumor cells: Identification as transferrin. Journal of Cellular Biochemistry 47:261-271, 1991	
	17	Cavanaugh, P.G., and Nicolson, G.L. The selection of a metastatic rat mammary adenocarcinoma cell line from a low metastatic parental population by an in vitro process based on cellular ability to proliferate in response to transferrin. Journal of Cellular Physiology. 174: 48-57 1998.	
	18	Cavanaugh, P.G., Jia, L., and Nicolson, G.L. Transferrin receptor overexpression enhances transferrin responsiveness and the metastatic growth of a rat mammary adenocarcinoma cell line. Breast Cancer Research and Treatment 56:203-217, 1999.	
	19	Hudson, P.J. Recombinant antibody constructs in cancer therapy. Curr Opin Immunol 11:548-557, 1999.	
	20	Scott, A.M., Welt, S. Antibody-based immunological therapies. Curr Opin Immunol 9:717-722, 1997.	
	21	Elliot, R. L., Stjernholm, R., and Elliot, M. C. Preliminary evaluation of platinum transferrin (MTPC-63) as a potential nontoxic treatment for breast cancer. Cancer Detect. Prev. 12: 469-480, 1988	
SW	22	Kemp, J.D., Smith, K.M., Mayer, J.M., Gomez, F., Thorson, J.A., and Naumann, P.W. Effects of anti-transferrin receptor antibodies on the growth of neoplastic cells. Pathobiology 60:27-32, 1992.	

Examiner Signature	<i>S. Wang</i>	Date Considered	8/13/06
--------------------	----------------	-----------------	---------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

BEST AVAILABLE COPY



Please type a plus sign (+) inside this box → ☐

PTO/SB/089 (10-88)
Approved for use through 10/31/89. OMB 0551-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 4

Complete if Known

Application Number	10/046,380
Filing Date	01/16/2002
First Named Inventor	Cavanaugh, Philip G.
Group Art Unit	1617
Examiner Name	Shengjun Wang
Attorney Doctet Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Includes name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issus number(s), publisher, city and/or country where published.	T ²
SW	23	Kovar, J., Naumann, P.W., Stewart, B.C., and Kemp, J.D. Differing sensitivity of non-hematopoietic human tumors to synergistic anti-transferrin receptor monoclonal antibodies and deferoxamine in vitro. Pathobiology 63: 65-70, 1995.	
	24	Hsi, R.A., Rosenthal, D.I., Glatstein, E. Photodynamic therapy in the treatment of cancer: current state of the art. Drugs 57:725-734 1999.	
	25	Akhlynina, T.V., Rosenkranz, A.A., Jans, D.A., Sobolev, A.S. Insulin-mediated intracellular targeting enhances the photodynamic activity of chlorin e6. Cancer Res. 55:1014-1019 1995.	
	26	Donald, P.J., Cardiff, R.D., He, D.E., Kendall, K. Monoclonal antibody-porphyrin conjugate for head and neck cancer: the possible magic bullet. Otolaryngol Head Neck Surg 105:781-787 1991.	
	27	Gijsens, A., De Witte, P. Targeting of chlorine E6 by EGF increasing its photodynamic activity in selective ways: Verh K Acad Geneesk Belg 62:329-352, 2000.	
	28	Del Governatore, M., Hamblin, M.R., Shea, C.R., Rizvi, I., Molpus, K.G., Tanabe, K.K., and Hasan, T. Experimental photoimmunotherapy of hepatic metastases of colorectal cancer with a 17.1A chlorin(e6) immunoconjugate. Cancer Res. 60:4200-4205, 2000.	
	29	Katsumi, T., Aizawa, K., Okunaka, T., Kuroiwa, Y., Li, Y., Saito, K., Konaka, C., and Kato, H. Photodynamic therapy using a diode laser with mono-L-aspartyl chorin e6 for implanted fibrosarcoma in mice. Jpn J Cancer Res. 85:1165-1170, 1994.	
	30	Bachor, R., Shea, C.R., Gillies, R., Hasan, T. Photosensitized destruction of human bladder carcinoma cells treated with chlorin e6-conjugated microspheres. Proc Natl Acad Sci U S A 88:1580-1584 1991.	
	31	Singh, M. Transferrin as a targeting ligand for liposomes and anticancer drugs. Curr Pharm Des 5:443-451, 1999.	
SW	32	Hamblin, M.R., and Newman, E.L. Photosensitizer targeting in photodynamic therapy. I. conjugates of haematoporphyrin with albumin and transferrin. J. Photochem Photobiol B. 26: 45-56, 1994.	

Examiner
Signature

SW

Date
Considered

8/19/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

BEST AVAILABLE COPY